

Patent Claims

1. Method for producing an automotive vehicle door (1), which has a supporting frame (11) provided with an opening (2), said supporting frame being connected movably to a body structure of the vehicle, the opening being sealed in an essentially moisture-proof manner by moulding with a curable material whilst forming a supporting plate (10) for receiving elements, such as window winders, loudspeakers (3) or the like, at least one guide rail for guiding a window pane (9), which is displaceable relative to the supporting frame, being provided in the supporting plate (Fig. 2c) in order to receive a lateral edge of the window pane.
2. Method for producing an automotive vehicle door (1), which has a supporting frame (11) provided with an opening (2), said supporting frame being connected movably to a body structure of the vehicle, characterised in that the opening is sealed at least in regions by moulding with a curable material whilst forming a supporting plate (10) for receiving elements, such as window winders, loudspeakers (3) or the like.
3. Method according to one of the preceding patent claims, characterised in that the moulding takes place by injection of a thermoplastic or thermoset plastic material (4).
4. Method according to one of the preceding claims, characterised in that the curable material is PPLGF (4).
5. Method according to claim 1 or 2, characterised in that the moulding takes place by foaming with a multi-component foaming agent material.

6. Method according to one of the preceding claims, characterised in that the supporting frame is inserted in an injection moulding or foaming tool in order to produce the supporting plate.
7. Method according to one of the preceding claims, characterised in that an outer edge of the opening has a circumferential web (5) for form-fitting and integral connection of the supporting plate to the supporting frame.
8. Method according to one of the preceding claims, characterised in that the opening is completely sealed in order to produce a liquid-proof supporting plate.
9. Method according to one of the preceding claims, characterised in that, after moulding the supporting plate, there is mounted detachably or non-detachably on the side orientated towards the vehicle interior, an interior lining (6) and/or, on the side of the supporting plate pointing towards the vehicle exterior, an external panelling (7).
10. Method according to one of the preceding claims, characterised in that the supporting frame (8a, 8b) is cast or produced in a shaping method.
11. Method according to one of the preceding claims, characterised in that the frame is one part or multi-part.
12. Method according to one of the preceding claims, characterised in that merely one opening is provided in the supporting frame which is sealed by the supporting plate.
13. Method according to claim 12, characterised in that the surface area of the opening, in a ratio to the surface area of the surface area

enclosed by the outer contour of the supporting frame, is more than 0.4, preferably more than 0.5.

14. Vehicle door produced according to one of the claims 1 to 11.
15. Vehicle door (1), which has a supporting frame (2) provided with a central opening, said supporting frame being connected movably to a body structure of the vehicle, characterised in that the opening is sealed in a moisture-proof manner by a supporting plate for receiving elements, such as window winders, loudspeakers (3) or the like, at least one guide rail for guiding a window pane (9), which is displaceable relative to the supporting frame, by receiving a lateral edge of the window pane, is provided in the supporting plate (Fig. 2c).